

TWO NEW SPECIES OF *VERNONIA* (ASTERACEAE) FROM
NORTHEASTERN MEXICO

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ABSTRACT

Two new species of *Vernonia* from the Sierra Madre Oriental of northeastern México are described: *V. hintoniorum* B.L. Turner (from Mpio. Hidalgo, Tamaulipas) and *V. zaragozana* B.L. Turner (from Mpio. Zaragoza, Nuevo León and closely adjacent Tamaulipas). Both appear to belong to sect. *Vernonia*, subsect. *Paniculatae*, series *Veræ*.

KEY WORDS: *Vernonia*, Asteraceae, México

Routine identification of Mexican Compositae has revealed the following new species.

VERNONIA HINTONIORUM B.L. Turner, *sp. nov.* TYPE: MEXICO.

Tamaulipas: Mpio. Hidalgo, Los Mimbres, 865 m, oak woods, 25 Aug 1994, *Hinton et al.* 24711 (HOLOTYPE: TEX!; Isotype: MEXU).

Vernoniae greggii A. Gray similis sed involucris cylindro-campanulatis (vs. campanulatis) et capitulis 4-5 flosculos gerentibus (vs. flosculis 15-80) differt.

Suffruticose stiffly erect much-branched perennial herbs 0.5-1.5 m high. Stems well-branched above the middle, brownish-red, sparsely to moderately puberulous with mostly appressed hairs. Midstem and upper leaves mostly 12-18 cm long, 5-6 cm wide; petioles 5-15 mm long; blades ovate-elliptic, pinnately nervate, pubescent on both surfaces, more so beneath, somewhat bicolored, the margins serrulate, the apices acute. Capitulescence a broad terminal corymbose leafy panicle 15-30 cm across, 10-20 cm high, the ultimate peduncles mostly 5-10 mm long. Involucres cylindrocampaulate, 5-8 mm high, 2.5-3.0 mm wide (pressed), 4-5 seriate; the bracts subglabrous, somewhat scarious,

acute to apiculate. Receptacle plane, ca. 1.5 mm across, adorned with short pubescent scales ca. 0.02 mm high. Florets 4-5 per head; corollas purple, glabrous, 8-9 mm long; tubes 5-6 mm long, the lobes linear-lanceolate, the 3 upper lobes connate basally. Achenes columnar, ca. 9 ribbed, ca. 3 mm long, sparsely atomiferous-glandular to glabrescent, sparsely hispidulous near the apex; pappus of numerous tawny inner bristles 4-6 mm long, the outermost bristles ca. 1 mm long.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Tamaulipas: Mpio. Hidalgo, El Mirador, 990 m, 1 Aug 1994, *Hinton et al.* 24525 (MEXU,TEX); Mirador, 850 m, 3 Aug 1994, *Hinton et al.* 24617 (MEXU,TEX); Cuatro Caminos to Los Mimbres, 690 m, 21 Sep 1994, *Hinton et al.* 24791 (MEXU,TEX); Mimbres, 800 m, 8 Nov 1994, *Hinton et al.* 25027 (MEXU,TEX).

Vernonia hintoniorum belongs to the subsect. *Paniculatae*, where it appears to have no close relatives. It can, however, be compared to *V. greggii*, especially in achene morphology, both species possessing atomiferous glandular, 8-9 ribbed achenes. *Vernonia hintoniorum* differs in having much smaller more nearly cylindrical involucre each with 4-5 florets (vs. campanulate with 15-80 florets).

It is a pleasure to name this distinct species for the remarkable Hinton family, the only collectors to assemble this plant to date.

VERNONIA ZARAGOZANA B.L. Turner, *sp. nov.* TYPE: MEXICO. Nuevo León: Mpio. Zaragoza, Los Potreritos, 1325 m, 2 Aug 1994, *Hinton et al.* 24718 (HOLOTYPE: TEX!; Isotype: MEXU!).

Vernoniae greggii A. Gray similis sed differt acheniis infirme costatis dense omnino pubescentibus trichomatibus brevibus porphyreis glandulosis (vs. valde costatis sparsim hispidulis) et pappo serie exteriori setarum brevium absque (vs. serie exteriori praesenti).

Perennial stiffly erect mostly unbranched herbs to 60 cm high. Stems minutely pubescent with both crinkled eglandular and erect glandular hairs. Midstem leaves mostly 8-9 cm long, 1-2 cm wide, crowded and gradually reduced upwards, sessile or subclasping, the blades 4-8 times as long as wide, narrowly lanceolate to elliptic-linear, pinnately veined, atomiferous glandular beneath to punctate, otherwise glabrous on the surfaces, the veins hispidulous, the margins entire to irregularly serrulate. Heads arranged in stiffly divaricate terminal corymboid panicles, the ultimate peduncles 8-50 mm long. Involucre campanulate, 7-8 mm high, the bracts lanceolate, 3-4 seriate, acute, their faces minutely pubescent throughout. Receptacle convex, ca. 2 mm across, pitted, glabrous. Florets 15-20 per head (estimated), the corollas 8-10 mm long, purple, bilabiate, the tubes 3-5 mm long, the upper 3 lobes fused to their apices

or nearly so, the 2 lobes of the lower lip variously connate. Achenes columnar, 2.5-3.0 mm long, ribless or seemingly so, deep rusty-brown, densely and minutely glandular-pubescent throughout; pappus of numerous white bristles 8-10 mm long, an outer shorter series completely absent.

ADDITIONAL SPECIMEN EXAMINED: MEXICO. Tamaulipas: Sierra de Guatemala, along Mex. highway 101, road to Jaumave, top of sierra at pass, SW of Cd. Victoria, oak woodlands among limestone boulders (karstic plateau with sink holes), ca. 1500 m, 14 Aug 1991, *Iltis & Simon 30784* (TEX).

While compared with *Vernonia greggii* in the above diagnosis, *V. zaragozana* is clearly not closely related to that taxon, although it appears to belong to the subsect. *Paniculatae*, series *Verae*, as defined by Jones (1976, 1978), which includes *V. greggii* along with seventeen other taxa, largely defined by their herbaceous habit, narrow leaves, paniculate capitulescence and restriction to northeastern México and eastern U.S.A.

When first encountered (*Iltis 30784*) I tentatively dubbed the sheet concerned as an aberrant specimen of *Vernonia greggii*. With the new and better collections obtained by the Hintons I have no doubt that the plants concerned belong to an undescribed species.

ACKNOWLEDGMENTS

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LITERATURE CITED

- Jones, S.B. 1976. Cytogenetics and affinities of *Vernonia* (Compositae) from the Mexican highlands and eastern North America. *Evolution* 30:455-462.
- . 1978. Biosystematics of the texanae *Vernonias* (Vernonieae: Compositae). *Sida* 7:264-281.